REMARKS/ARGUMENTS

Claims 1-19 are pending. Claims 18 and 19 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 1-8, 11-14, and 17 were rejected as being unpatentable over U.S. Patent No. 6,272,337 to Mount et al. in view of U.S. Patent No. 5,365,516 to Jandrell. Claims 9-10 and 15-16 were rejected as unpatentable over Mount and Jandrell and further in view of U.S. Patent Application Publication 2003/0060224 to Nelson, Jr. et al.

The undersigned appreciates the Examiner's courtesy in conducting a telephone interview on April 8, 2008 to discuss the above-noted rejections. The substance of what was discussed in the interview is captured in the following remarks.

Response to Rejections Under 35 U.S.C. 112, First Paragraph

The Office Action rejects Claim 18 under 35 U.S.C. 112, first paragraph, apparently on the ground that the application as filed did not contain a written description of the underlined aspect of the claimed invention below:

> "the test apparatus receiving said access request and analyzing it to assess the performance of the terminal based upon assessment of the access request and without prompting the terminal to do anything other than transmit said access request."

Applicant respectfully submits that this aspect of Claim 18 is fully supported in the application as filed. The specification at page 1 describes that the present invention achieves a simplified method and apparatus for testing mobile telephone terminals "by using a predetermined transmitted data pattern to trigger a response, preferably, an access request, from the terminal, and analysing the response to assess the performance of the terminal without responding to the terminal." The fact that the test apparatus does not respond to the terminal after transmission of the access request, **by definition**, means that **the test apparatus does not prompt the terminal to do anything other than transmit the access request**.

Additionally, at page 3, fourth full paragraph, the specification states that the invention simplifies the test set architecture by "**simply** getting the mobile 10 to send an Access burst on the Random Access Channel." At the top of page 4, the specification states that the "mobile 10 responds to the fixed BCCH by sending an Access burst **but it does not get a reply**." Again, the fact that the test apparatus **simply** prompts the mobile terminal to send an access request, after which the mobile terminal **does not get a reply**, means that the test apparatus does not prompt the terminal to do anything other than transmit the access request.

Accordingly, it is respectfully submitted that the invention defined by Claim 18 is fully supported by the specification.

With respect to Claim 19, the Office Action rejected it under 35 U.S.C. 112, first paragraph, apparently on the ground that the application as filed did not contain a written description of the underlined aspect of the claim below:

> "a generator for generating a signal corresponding to said predetermined data pattern on a downlink, said signal being adapted to be recognizable by the terminal and to trigger it to transmit an access request on an uplink, and a detector for detecting and analyzing said access request to assess the performance of the terminal, the apparatus having no capability of continuing communication with the terminal in response to said access request other than through said signal on the downlink."

Applicant respectfully submits this is fully supported in the application as filed. As illustrated in Figure 2 and described in the specification at page 3, the IQ data applied to the IQ modulator 6 comes from a memory 13 that stores a fixed Broadcast Control Channel (BCCH) as IQ samples. "These are clocked out by an address generator 14 and applied to the IQ modulator 6" (p. 3, fifth full paragraph). Thus, the generator 14 generates a signal corresponding to the predetermined data pattern (i.e., the BCCH) and applies it to the IQ modulator.

As described in the first paragraph on page 4, the mobile terminal 10 responds to the fixed BCCH by sending an access burst, but does not get a reply from the test apparatus. Thus,

the signal is clearly recognizable by the terminal and triggers the terminal to transmit an access request on an uplink.

Furthermore, in that same paragraph, the specification describes that a power detector 15 in the test set determines whether the mobile terminal makes a transmission. The power detector may determine whether the transmission power level is above a threshold level or may determine the actual transmission power level and report this to the display 16. As indicated in the second paragraph of page 4, alternatively, the access burst may be captured by a radio frequency receiver and analyzed to determine modulation quality, such as vector value. The analysis can also determine spectral characteristics such as adjacent channel power, occupied bandwidth, and spurious signals.

Thus, this disclosure in the application as filed clearly supports "a detector for detecting and analyzing said access request to assess the performance of the terminal, the apparatus having no capability of continuing communication with the terminal in response to said access request other than through said signal on the downlink." Again, the test apparatus **does not reply to the terminal** after the access request is transmitted, and hence it has no capability of continuing communication with the terminal in response to the access request other than through the signal (i.e., the BCCH or the like) on the downlink.

For these reasons, it is respectfully submitted that Claim 19 is fully supported in the application as filed. Accordingly, Applicant respectfully submits that the rejections of Claims 18 and 19 under 35 U.S.C. 112, first paragraph, are incorrect.

However, as discussed in the interview, Applicant is willing to amend Claims 18 and 19 as indicated above, to employ language that has verbatim support in the specification. As amended, these claims now refer to the fact that after receiving the access request from the terminal, the test apparatus does not reply to the terminal. This is fully supported by the portions of the specification referred to above.

Therefore, the rejections under 35 U.S.C. 112, first paragraph, have been overcome.

Response to Rejections Under 35 U.S.C. 103(a)

Claim 1 recites a method comprising three steps, namely, (1) transmitting a predetermined data pattern from a test apparatus to the mobile telephone terminal on a downlink, (2) the terminal receiving the predetermined data pattern and responding by transmitting an access request on an uplink to the test apparatus, and (3) the test apparatus receiving the access request and analyzing the access request to assess the performance of the terminal based upon assessment of the access request alone. The method of Claim 1 thus is simple in that the test apparatus analyzes the access request alone to assess the performance of the terminal, and does not need to engage in an exchange of messages in response to the access request in order to analyze the performance of the terminal. The method of Claim 1 requires only that the terminal issue an access request, and the test apparatus analyze the access request. Further exchanges between the test apparatus and terminal are unnecessary.

The test apparatus of independent Claim 11, similarly, is structured and arranged to transmit a predetermined data pattern on a downlink to prompt a response from the terminal in the form of an access request on an uplink, the test apparatus being structured and arranged to analyze the access request and produce a test result based upon assessment of the access request alone.

The test apparatus of independent Claim 17 is also similar in that it comprises a memory to store a predetermined data pattern and a transmitter to transmit said predetermined data pattern on a downlink to said mobile telephone terminal in order to prompt a response from said mobile telephone terminal in the form of an access request on an uplink to the test apparatus, a receiver to receive said access request on the uplink from the terminal, and a processor to analyze said access request and produce an assessment of the performance of the terminal based upon assessment of the access request alone.

Independent Claims 18 and 19 also share the feature that performance of the mobile terminal is assessed based on analysis of the access request alone.

The Office Action asserted that Mount discloses aspects of independent Claims 1, 11, and 17, but fails to disclose that the test apparatus receives the access request and analyzes the access request to assess the performance of the terminal based on assessment of the access request alone.

However, the Office Action asserted that this missing aspect is supplied by Jandrell. The Office Action cited col. 29, lines 55-64 of Jandrell as allegedly teaching this aspect of the claimed method.

Applicant respectfully submits that Jandrell does not teach or suggest modifying Mount's method to assess terminal performance by analyzing an access request alone. Jandrell relates to a system that determines the location of a device relative to a coordinate system (e.g., a GPS system). In particular, the system is a two-way radio communications system employing a number of base station transceivers, and at least one transponder device (mobile terminal) that transmits and receives data using a radio frequency communication link employed by each base station.

Jandrell is primarily directed to improving such a system so as to locate the transponder devices more precisely and to communicate more efficiently. These objects are said to be achieved at least in part by virtue of how the base station's control center coordinates the communication between the base station and the transponder devices.

In fact, the passage at col. 29, lines 55-65, as cited in the Office Action, relates to this functionality of the control center. To better understand that passage, it is helpful to also consider the two paragraphs that precede it:

> "A more efficient procedure allows the transponder to request service only when it needs it. To prevent these service requests from disrupting the flow of normal polled operations, the system identifies a portion of the system's cycle as being available for making service requests by random transponders. To minimize the 'damage' caused by the small number of collisions that must inevitably occur, the service requests are made only one time-slot

> in duration, and by ensuring that they are transmitted in synchronism with the time-slots, when a collision occurs, it spans only one time-slot.
>
> "Transponders requiring service (for example, having messages to be picked up), or needing to send their status, randomly select one of the available random-access time-slots, during which it transmits a service request or status message to the system. If the message is received correctly by the system, the system will send an acknowledgment within the next two system cycles. If an acknowledgment is not received, the transponder will try again, until it receives a successful acknowledgment, in another randomly selected time-slot from the available random-access time-slots, but with an increasing delay between attempts, to prevent overload of the system. The 'random retry with increasing delays between retries' technique has been successfully used in the design and implementation of Local-Area-Networks for computer systems for some time, and the performance characteristics of the technique are well understood.
>
> "The control center program adjusts the proportion of the system cycle devoted to random access service requests based on its assessment of the inbound requests versus the outbound traffic priorities, in such a way as to optimize the total traffic throughput. A preferred embodiment of the adjustment program's strategy relies on the increasing the inbound proportion when the rate of inbound request collisions increases above some predetermined threshold, and decreasing it when it falls below the threshold."

(Jandrell, col. 29, lines 26-64.)

From this description in Jandrell, it is apparent that the cited passage is describing a strategy for controlling the amount of system resources allocated to servicing access requests, rather than analyzing the access requests to assess the performance of the transponder/terminal. Indeed, this passage does not teach or remotely suggest any analysis of the access requests to assess terminal performance. This is understandable, because Jandrell is not concerned with terminal performance, but rather is concerned with base station/control center performance. Indeed, as far as the undersigned can determine, there is no disclosure in Jandrell relating to mobile terminal performance.

It is also significant that according to the above-quoted passage, after the terminal transmits an access request, "the system will send an acknowledgment within the next two system cycles. If an acknowledgment is not received, the transponder will try again, until it receives a successful acknowledgment . . . ." This is further described at col. 32 beginning at line 55, wherein the method of Figure 13 is being described:

> "At block 1360, the transponder performs a test to determine if the system response has arrived. If the system response was sent and has been received by the transponder, flow proceeds to block 1362 where the transponder responds to the system response. **The system response is in the form of a polling message which triggers the transponder to transmit a variable number of packets of the message it wants to send.** Preferably, the number of packets has a maximum limit of 15 (equals the maximum indicated by four bits).

Thus, according to Jandrell, the system does more than just receive the access request. It then triggers the terminal to transmit a variable number of packets of the message the terminal wants to send.

Therefore, neither Mount nor Jandrell discloses a method or apparatus in which a test apparatus receives an access request from a terminal and analyzes the access request to assess the performance of the terminal based upon assessment of the access request alone. In both these references, the access request serves to initiate a process wherein the test equipment issues additional commands to cause additional transmissions from the terminal.

Furthermore, Nelson does not supply the teachings that are lacking in Mount and Jandrell. Nelson is concerned with measuring path losses in a mobile communications system and involves sending a test signal and an indication of the power level of the test signal so as to allow the *mobile terminal* (not the test apparatus) to determine power loss in the transmission path. Nelson does not suggest a test apparatus that analyzes an access request from a mobile terminal as claimed.

Accordingly, it is submitted that independent Claims 1, 11, and 17, all of which share the feature that the test apparatus analyzes the access request to assess the performance of the terminal based upon assessment of the access request alone, are patentable over the references.

Independent Claim 18 is similar to Claim 1, but recites that the test apparatus assesses the performance of the terminal based upon assessment of the access request and without prompting the terminal to do anything other than transmit the access request. As apparent from the above remarks, neither Mount, Jandrell, nor Nelson discloses such a method. Therefore, Claim 18 is patentable over the references.

Independent Claim 19 is similar to Claim 17, but recites that the apparatus has no capability of continuing communication with the terminal in response to the access request other than through said signal (i.e., the initial signal having the predetermined data pattern) on the downlink. The above remarks make clear that in both Mount and Jandrell, after the access request, the test equipment engages in further communications with the mobile terminal. Thus, Claim 19 is not suggested by the references and is patentable.

The claims dependent on the independent claims are patentable for at least the same reasons noted above. Furthermore, the additional features of the dependent claims, in combination with those of the independent claims, are not suggested by the references.

Conclusion

Based on the above amendments and remarks, it is submitted the application is in condition for allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

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